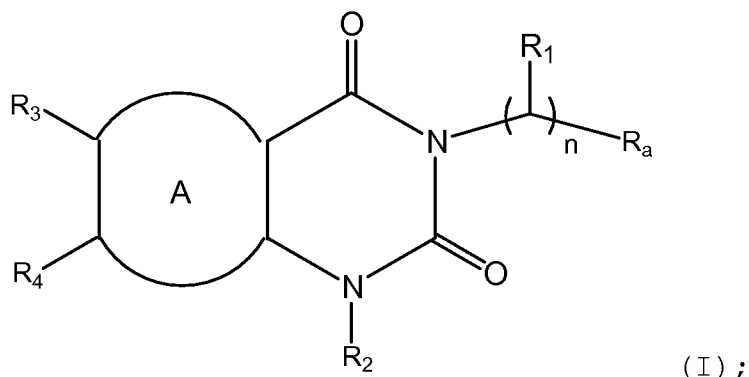


CLAIM AMENDMENTS

Please replace all prior versions and listings of claims with the amended claims as follows:

1. (Currently amended) A compound having formula (I):



wherein:

ring A is an aryl ~~or heteroaryl~~ ring wherein said aryl ~~or heteroaryl~~ ring is either unsubstituted or substituted with one or more substituents selected from halogen, $-R^\circ$, $-OR^\circ$, $-SR^\circ$, 1,2-methylene-dioxy, 1,2-ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted $-O(Ph)$, unsubstituted $-CH_2(Ph)$, unsubstituted $-CH_2CH_2(Ph)$ or (Ph), $-O(Ph)$, $-CH_2(Ph)$, or $-CH_2CH_2(Ph)$ substituted with one or more $-R^\circ$ groups; $-NO_2$, $-CN$, $-N(R^\circ)_2$, $-NR^\circ C(O)R^\circ$, $-NR^\circ C(O)N(R^\circ)_2$, $-NR^\circ CO_2R^\circ$, $-NR^\circ NR^\circ C(O)R^\circ$, $-NR^\circ NR^\circ C(O)N(R^\circ)_2$, $-NR^\circ NR^\circ CO_2R^\circ$, $-C(O)C(O)R^\circ$, $-C(O)CH_2C(O)R^\circ$, $-CO_2R^\circ$, $-C(O)R^\circ$, $-C(O)N(R^\circ)_2$, $-OC(O)N(R^\circ)_2$, $-S(O)_2R^\circ$, $-SO_2N(R^\circ)_2$, $-S(O)R^\circ$, $-NR^\circ SO_2N(R^\circ)_2$, $-NR^\circ SO_2R^\circ$, $-C(=S)N(R^\circ)_2$, $-C(=NH)N(R^\circ)_2$, or $-(CH_2)_qNHC(O)R^\circ$; wherein:

q is 0-2; and wherein:

each R° is independently selected from hydrogen, a C_{1-6} aliphatic, wherein said C_{1-6} aliphatic group is either unsubstituted or substituted with one or more substituents

selected from =O, =S, =NNHR^{*}, =NN(R^{*})₂, =NNHC(O)R^{*}, =NNHCO₂(alkyl), =NNHSO₂(alkyl), =NR^{*}NH₂, NH(C₁₋₄ aliphatic), N(C₁₋₄ aliphatic)₂, halogen, C₁₋₄ aliphatic, OH, O(C₁₋₄ aliphatic), NO₂, CN, CO₂H, CO₂(C₁₋₄ aliphatic), O(halo C₁₋₄ aliphatic), or halo C₁₋₄ aliphatic; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, -O(Ph), or -CH₂(Ph), or wherein two occurrences of R^o, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each R^{*} is independently selected from hydrogen or a C₁₋₆ aliphatic group wherein said aliphatic group of R^{*} is either unsubstituted or substituted with one or more substituents selected from NH₂, NH(C₁₋₄ aliphatic), N(C₁₋₄ aliphatic)₂, halogen, C₁₋₄ aliphatic, OH, O(C₁₋₄ aliphatic), NO₂, CN, CO₂H, CO₂(C₁₋₄ aliphatic), O(halo C₁₋₄ aliphatic), or halo(C₁₋₄ aliphatic);

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from -R⁺, -N(R⁺)₂, -C(O)R⁺, -OR⁺, -CO₂R⁺, -C(O)C(O)R⁺, -C(O)CH₂C(O)R⁺, -SO₂R⁺, -SO₂N(R⁺)₂, -C(=S)N(R⁺)₂, -C(=NH)-N(R⁺)₂, or -NR⁺SO₂R⁺; wherein:

R⁺ is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted C₁₋₆ aliphatic, unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted -CH₂(Ph), unsubstituted -CH₂CH₂(Ph); or C₁₋₆ aliphatic, phenyl(Ph), -O(Ph), -CH₂(Ph), or -CH₂CH₂(Ph) substituted with one or more groups selected from NH₂, NH(C₁₋₄ aliphatic), N(C₁₋₄ aliphatic)₂, halogen, C₁₋₄ aliphatic, OH, O(C₁₋₄ aliphatic), NO₂, CN, CO₂H, CO₂(C₁₋₄ aliphatic), O(halo C₁₋₄ aliphatic), or halo(C₁₋₄ aliphatic) or wherein two occurrences of R⁺, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

R_a is -COOH;

n is [[0-4]] 1;

R₁ is [[H, or]] a hydroxyaliphatic, aminoaliphatic, aliphatic-COOH, aliphatic-CONH₂, or arylaliphatic wherein said hydroxyaliphatic, aminoaliphatic, aliphatic-COOH, aliphatic-CONH₂, or arylaliphatic is either unsubstituted or substituted with one or more substituents selected from halogen, -R^o, -OR^o, -SR^o, 1,2-methylene-dioxy, 1,2-ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted -CH₂(Ph), unsubstituted -CH₂CH₂(Ph) or (Ph), -O(Ph), -CH₂(Ph), or -CH₂CH₂(Ph) substituted with one or more -R^o groups; -NO₂, -CN, -N(R^o)₂, -NR^oC(O)R^o, -NR^oC(O)N(R^o)₂, -NR^oCO₂R^o, -NR^oNR^oC(O)R^o, -NR^oNR^oC(O)N(R^o)₂, -NR^oNR^oCO₂R^o, -C(O)C(O)R^o, -C(O)CH₂C(O)R^o, -CO₂R^o, -C(O)R^o, -C(O)N(R^o)₂, -OC(O)N(R^o)₂, -S(O)₂R^o, -SO₂N(R^o)₂, -S(O)R^o, -NR^oSO₂N(R^o)₂, -NR^oSO₂R^o, -C(=S)N(R^o)₂, -C(=NH)-N(R^o)₂, or -(CH₂)_qNHC(O)R^o; wherein:

q is 0-2; and wherein:

each R^o is independently selected from hydrogen, a C₁₋₆ aliphatic, wherein said C₁₋₆ aliphatic group is either unsubstituted or substituted with one or more substituents selected from =O, =S, =NNHR^{*}, =NN(R^{*})₂, =NNHC(O)R^{*}, =NNHCO₂(alkyl), =NNHSO₂(alkyl), =NR^{*}NH₂, NH(C₁₋₄ aliphatic), N(C₁₋₄ aliphatic)₂, halogen, C₁₋₄ aliphatic, OH, O(C₁₋₄ aliphatic), NO₂, CN, CO₂H, CO₂(C₁₋₄ aliphatic), O(halo C₁₋₄ aliphatic), or halo C₁₋₄ aliphatic; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, -O(Ph), or -CH₂(Ph), or wherein two occurrences of R^o, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each R^{*} is independently selected from hydrogen or a C₁₋₆ aliphatic group wherein said aliphatic group of R^{*} is either

unsubstituted or substituted with one or more substituents selected from NH_2 , $\text{NH}(\text{C}_{1-4} \text{ aliphatic})$, $\text{N}(\text{C}_{1-4} \text{ aliphatic})_2$, halogen, $\text{C}_{1-4} \text{ aliphatic}$, OH , $\text{O}(\text{C}_{1-4} \text{ aliphatic})$, NO_2 , CN , CO_2H , $\text{CO}_2(\text{C}_{1-4} \text{ aliphatic})$, $\text{O}(\text{halo } \text{C}_{1-4} \text{ aliphatic})$, or $\text{halo}(\text{C}_{1-4} \text{ aliphatic})$;

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from $-\text{R}^+$, $-\text{N}(\text{R}^+)_2$, $-\text{C}(\text{O})\text{R}^+$, $-\text{OR}^+$, $-\text{CO}_2\text{R}^+$, $-\text{C}(\text{O})\text{C}(\text{O})\text{R}^+$, $-\text{C}(\text{O})\text{CH}_2\text{C}(\text{O})\text{R}^+$, $-\text{SO}_2\text{R}^+$, $-\text{SO}_2\text{N}(\text{R}^+)_2$, $-\text{C}(=\text{S})\text{N}(\text{R}^+)_2$, $-\text{C}(=\text{NH})-\text{N}(\text{R}^+)_2$, or $-\text{NR}^+\text{SO}_2\text{R}^+$; wherein:

R^+ is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted C_{1-6} aliphatic, unsubstituted phenyl (Ph), unsubstituted $-\text{O}(\text{Ph})$, unsubstituted $-\text{CH}_2(\text{Ph})$, unsubstituted $-\text{CH}_2\text{CH}_2(\text{Ph})$; or C_{1-6} aliphatic, phenyl(Ph), $-\text{O}(\text{Ph})$, $-\text{CH}_2(\text{Ph})$, or $-\text{CH}_2\text{CH}_2(\text{Ph})$ substituted with one or more groups selected from NH_2 , $\text{NH}(\text{C}_{1-4} \text{ aliphatic})$, $\text{N}(\text{C}_{1-4} \text{ aliphatic})_2$, halogen, $\text{C}_{1-4} \text{ aliphatic}$, OH , $\text{O}(\text{C}_{1-4} \text{ aliphatic})$, NO_2 , CN , CO_2H , $\text{CO}_2(\text{C}_{1-4} \text{ aliphatic})$, $\text{O}(\text{halo } \text{C}_{1-4} \text{ aliphatic})$, or $\text{halo}(\text{C}_{1-4} \text{ aliphatic})$ or wherein two occurrences of R^+ , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

R_2 is an unsubstituted aliphatic, or a cycloaliphatic-aliphatic or heteroarylaliphatic, wherein said cycloaliphatic-aliphatic or heteroarylaliphatic is either unsubstituted or substituted with one or more substituents selected from halogen, $-\text{R}^\circ$, $-\text{OR}^\circ$, $-\text{SR}^\circ$, 1,2-methylene-dioxy, 1,2-ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted $-\text{O}(\text{Ph})$, unsubstituted $-\text{CH}_2(\text{Ph})$, unsubstituted $-\text{CH}_2\text{CH}_2(\text{Ph})$ or (Ph), $-\text{O}(\text{Ph})$, $-\text{CH}_2(\text{Ph})$, or $-\text{CH}_2\text{CH}_2(\text{Ph})$ substituted with one or more $-\text{R}^\circ$ groups; $-\text{NO}_2$, $-\text{CN}$, $-\text{N}(\text{R}^\circ)_2$, $-\text{NR}^\circ\text{C}(\text{O})\text{R}^\circ$, $-\text{NR}^\circ\text{C}(\text{O})\text{N}(\text{R}^\circ)_2$, $-\text{NR}^\circ\text{CO}_2\text{R}^\circ$, $-\text{NR}^\circ\text{NR}^\circ\text{C}(\text{O})\text{R}^\circ$, $-\text{NR}^\circ\text{NR}^\circ\text{C}(\text{O})\text{N}(\text{R}^\circ)_2$, $-\text{NR}^\circ\text{NR}^\circ\text{CO}_2\text{R}^\circ$, $-\text{C}(\text{O})\text{C}(\text{O})\text{R}^\circ$, $-\text{C}(\text{O})\text{CH}_2\text{C}(\text{O})\text{R}^\circ$, $-\text{CO}_2\text{R}^\circ$, $-\text{C}(\text{O})\text{R}^\circ$, $-\text{C}(\text{O})\text{N}(\text{R}^\circ)_2$, $-\text{OC}(\text{O})\text{N}(\text{R}^\circ)_2$, $-\text{S}(\text{O})_2\text{R}^\circ$, $-\text{SO}_2\text{N}(\text{R}^\circ)_2$, $-\text{S}(\text{O})\text{R}^\circ$,

$-\text{NR}^\circ\text{SO}_2\text{N}(\text{R}^\circ)_2$, $-\text{NR}^\circ\text{SO}_2\text{R}^\circ$, $-\text{C}(=\text{S})\text{N}(\text{R}^\circ)_2$, $-\text{C}(=\text{NH})-\text{N}(\text{R}^\circ)_2$, or
 $-(\text{CH}_2)_q\text{NHC}(\text{O})\text{R}^\circ$; wherein:

q is 0-2; and wherein:

each R° is independently selected from hydrogen, a C_{1-6} aliphatic, wherein said C_{1-6} aliphatic group is either unsubstituted or substituted with one or more substituents selected from $=\text{O}$, $=\text{S}$, $=\text{NNHR}^*$, $=\text{NN}(\text{R}^*)_2$, $=\text{NNHC}(\text{O})\text{R}^*$, $=\text{NNHCO}_2(\text{alkyl})$, $=\text{NNHSO}_2(\text{alkyl})$, $=\text{NR}^*\text{NH}_2$, $\text{NH}(\text{C}_{1-4} \text{ aliphatic})$, $\text{N}(\text{C}_{1-4} \text{ aliphatic})_2$, halogen, $\text{C}_{1-4} \text{ aliphatic}$, OH , $\text{O}(\text{C}_{1-4} \text{ aliphatic})$, NO_2 , CN , CO_2H , $\text{CO}_2(\text{C}_{1-4} \text{ aliphatic})$, $\text{O}(\text{halo } \text{C}_{1-4} \text{ aliphatic})$, or halo $\text{C}_{1-4} \text{ aliphatic}$; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, $-\text{O}(\text{Ph})$, or $-\text{CH}_2(\text{Ph})$, or wherein two occurrences of R° , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each R^* is independently selected from hydrogen or a C_{1-6} aliphatic group wherein said aliphatic group of R^* is either unsubstituted or substituted with one or more substituents selected from NH_2 , $\text{NH}(\text{C}_{1-4} \text{ aliphatic})$, $\text{N}(\text{C}_{1-4} \text{ aliphatic})_2$, halogen, $\text{C}_{1-4} \text{ aliphatic}$, OH , $\text{O}(\text{C}_{1-4} \text{ aliphatic})$, NO_2 , CN , CO_2H , $\text{CO}_2(\text{C}_{1-4} \text{ aliphatic})$, $\text{O}(\text{halo } \text{C}_{1-4} \text{ aliphatic})$, or halo($\text{C}_{1-4} \text{ aliphatic}$);

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from $-\text{R}^+$, $-\text{N}(\text{R}^+)_2$, $-\text{C}(\text{O})\text{R}^+$, $-\text{OR}^+$, $-\text{CO}_2\text{R}^+$, $-\text{C}(\text{O})\text{C}(\text{O})\text{R}^+$, $-\text{C}(\text{O})\text{CH}_2\text{C}(\text{O})\text{R}^+$, $-\text{SO}_2\text{R}^+$, $-\text{SO}_2\text{N}(\text{R}^+)_2$, $-\text{C}(=\text{S})\text{N}(\text{R}^+)_2$, $-\text{C}(=\text{NH})-\text{N}(\text{R}^+)_2$, or $-\text{NR}^+\text{SO}_2\text{R}^+$; wherein:

R^+ is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted C_{1-6} aliphatic, unsubstituted phenyl (Ph), unsubstituted $-\text{O}(\text{Ph})$, unsubstituted $-\text{CH}_2(\text{Ph})$, unsubstituted $-\text{CH}_2\text{CH}_2(\text{Ph})$; or C_{1-6} aliphatic, phenyl(Ph), $-\text{O}(\text{Ph})$, $-\text{CH}_2(\text{Ph})$, or $-\text{CH}_2\text{CH}_2(\text{Ph})$ substituted with one or more groups selected from NH_2 , $\text{NH}(\text{C}_{1-4} \text{ aliphatic})$, $\text{N}(\text{C}_{1-4} \text{ aliphatic})_2$, halogen,

C₁₋₄ aliphatic, OH, O(C₁₋₄ aliphatic), NO₂, CN, CO₂H, CO₂(C₁₋₄ aliphatic), O(halo C₁₋₄ aliphatic), or halo(C₁₋₄ aliphatic) or wherein two occurrences of R⁺, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

R³ and R⁴ are independently selected from R¹¹, R¹², R¹⁴ or R¹⁵;

wherein:

each R¹¹ is independently selected from 1,2-methylenedioxy, 1,2-ethylenedioxy, R⁶ or (CH₂)_m-Y;

wherein m is 0, 1 or 2; and

Y is selected from halogen, CN, NO₂, CF₃, OCF₃, OH, SR⁶, S(O)R⁶, SO₂R⁶, NH₂, NHR⁶, N(R⁶)₂, NR⁶R⁸, COOH, COOR⁶ or OR⁶;

each R¹² is independently selected from (C₁-C₆)-straight or branched alkyl, or (C₂-C₆)-straight or branched alkenyl or alkynyl; and each R¹² optionally comprises up to 2 substituents, wherein:

the first of said substituents, if present, is selected from R¹¹, R¹⁴ and R¹⁵, and

the second of said substituents, if present, is R¹¹;

each R¹⁴ is independently selected from OR¹⁵, OC(O)R⁶, OC(O)R¹⁵, OC(O)OR⁶, OC(O)OR¹⁵, OC(O)N(R⁶)₂, OP(O)(OR⁶)₂, SR⁶, SR¹⁵, S(O)R⁶, S(O)R¹⁵, SO₂R⁶, SO₂R¹⁵, SO₂N(R⁶)₂, SO₂NR¹⁵R⁶, SO₃R⁶, C(O)R¹⁵, C(O)OR¹⁵, C(O)R⁶, C(O)OR⁶, NC(O)C(O)R⁶, NC(O)C(O)R¹⁵, NC(O)C(O)OR⁶, NC(O)C(O)N(R⁶)₂, C(O)N(R⁶)₂, C(O)N(OR⁶)R⁶, C(O)N(OR⁶)R¹⁵, C(NOR⁶)R⁶, C(NOR⁶)R¹⁵, N(R⁶)₂,

$\text{NR}^6\text{C}(\text{O})\text{R}^{11}$, $\text{NR}^6\text{C}(\text{O})\text{R}^6$, $\text{NR}^6\text{C}(\text{O})\text{R}^{15}$, $\text{NR}^6\text{C}(\text{O})\text{OR}^6$, $\text{NR}^6\text{C}(\text{O})\text{OR}^{15}$,
 $\text{NR}^6\text{C}(\text{O})\text{N}(\text{R}^6)_2$, $\text{NR}^6\text{C}(\text{O})\text{NR}^{15}\text{R}^6$, $\text{NR}^6\text{SO}_2\text{R}^6$, $\text{NR}^6\text{SO}_2\text{R}^{15}$, $\text{NR}^6\text{SO}_2\text{N}(\text{R}^6)_2$,
 $\text{NR}^6\text{SO}_2\text{NR}^{15}\text{R}^6$, $\text{N}(\text{OR}^6)\text{R}^6$, $\text{N}(\text{OR}^6)\text{R}^{15}$, $\text{P}(\text{O})(\text{OR}^6)\text{N}(\text{R}^6)_2$, and
 $\text{P}(\text{O})(\text{OR}^6)_2$;

each R^{15} is a cycloaliphatic, aryl, heterocyclyl, or heteroaromatic; and each R^{15} optionally comprises up to 3 substituents, each of which, if present, is R^{11} ;

each R^6 is independently selected from H, $(\text{C}_1\text{-C}_6)$ -straight or branched alkyl, or $(\text{C}_2\text{-C}_6)$ straight or branched alkenyl; and each R^6 optionally comprises a substituent that is R^7 ;

R^7 is a cycloaliphatic, aryl, heterocyclyl, or heteroaromatic; and each R^7 optionally comprises up to 2 substituents independently chosen from H, $(\text{C}_1\text{-C}_6)$ -straight or branched alkyl, $(\text{C}_2\text{-C}_6)$ straight or branched alkenyl, 1,2-methylenedioxy, 1,2-ethylenedioxy, or $(\text{CH}_2)_p\text{-Z}$;

wherein p is 0, 1 or 2; and

Z is selected from halogen, CN, NO_2 , CF_3 , OCF_3 , OH, $\text{S}(\text{C}_1\text{-C}_6)\text{-alkyl}$, $\text{SO}(\text{C}_1\text{-C}_6)\text{-alkyl}$, $\text{SO}_2(\text{C}_1\text{-C}_6)\text{-alkyl}$, NH_2 , $\text{NH}(\text{C}_1\text{-C}_6)\text{-alkyl}$, $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})_2$, $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})\text{R}^8$, COOH , $\text{C}(\text{O})\text{O}(\text{C}_1\text{-C}_6)\text{-alkyl}$ or $\text{O}(\text{C}_1\text{-C}_6)\text{-alkyl}$; and

R^8 is $-\text{C}(\text{O})\text{CH}_3$, $-\text{C}(\text{O})\text{Ph}$ or $-\text{SO}_2\text{Ph}$;

provided that:

R^3 and R^4 are not simultaneously hydrogen;

when R^3 is H, then R^4 is not chloro; and

when R^4 is H, then R^3 is not $-\text{SCH}_3$ or $-\text{NH}-\text{C}(\text{O})\text{CH}_3$.

2. (Currently amended) The compound according to claim 1, wherein ring A is an optionally substituted [[5 or]] 6 membered

~~aryl or heteroaryl ring, wherein said heteroaryl ring contains up to 2 ring heteroatoms independently selected from O, S, or NH.~~

3. (Original) The compound according to claim 2, wherein ring A is phenyl.

4. (Currently amended) The compound according to claim 1, wherein R₁ is ~~hydrogen~~, -(CH₂)_q-X, wherein q is 1-4, and X is OH, NH₂, COOH or CONH₂, (C1-C6)-alkyl, or benzyl.

5. (Currently amended) The compound according to claim 4, wherein R₁ is ~~hydrogen~~, hydroxymethyl, methyl, -CH₂COOH, -CH₂CONH₂, aminobutyl, or isopentyl.

6. (Previously presented) The compound according to claim 1, wherein R₂ is selected from butyl, isobutyl, cyclopentyl, cyclohexylmethyl, pyridylmethyl, furanylmethyl, or thienylmethyl.

7. (Previously presented) The compound according to claim 6, wherein R₂ is selected from 2-furanylmethyl.

8. (Canceled)

9. (Previously presented) A pharmaceutical composition comprising a compound according to any one of claims 1-7 and 17-18 and a pharmaceutically acceptable adjuvant or carrier.

10-16. (Canceled)

17. (Previously presented) The compound according to claim 1 wherein R₃ and R₄ are independently selected from hydrogen, halo, acetamido, allyloxy, thiophenyl, sulfoxyalkyl, or sulfoxyphenyl.

18. (Currently amended) A compound according to claim 1
selected from:

